Chamber Avenue Bike Lanes														
Construction Cost Estimate for Grant Sourcing 8/13/2019	Purposes													
8/13/2019								State DHCD			Prince			
l							PG Stewardship	Community	Bikewa		Georges			R Funding
Work Item Mobilization	Quantity 1	Unit LS	\$	Unit Cost 60,000.00		Fotal Cost 60,000.00	Funding \$ 13,250	Legacy	Gran \$ 9,1		CDBG	TAP \$ 5,000	_	32,638
Mill Pavement 1.5"	5,643	SY	\$	4.00	\$	22,572.00	+ ====================================		\$ 22,5			φ 3,000	Ť	02,000
Remove Curb and Gutter	2,923	LF	\$	4.00	\$	11,692.00			\$ 11,6	92				
Remove Inlet or Man Hole Remove Pavement	3 4,030	EA SY	\$	924.00	\$	2,772.00 16,120.00	\$ 2,772		\$ 16,1	20				
Remove Sidewalk	14,030	SF	\$	2.00	\$	28,060.00			٦ 10,1	.20			\$	28,060
Remove Existing Sign and Pole	24	EA	\$	75.00	\$	1,800.00			\$ 1,8	300				
Relocate Existing Sign and Pole	3	EA	\$	225.00	\$	675.00			•	575				
Sawcut Existing Pavement Rough Grading	175 1	LF AC	\$	2.00 1,350.00	\$	350.60 1,417.50			\$ 3 \$ 1,4	351 118				
Cut and Fill	2,485	CY	\$	10.00	\$	24,850.00	\$ 8,828		γ <u>1,</u> ¬	10		\$ 14,350	\$	1,672
		ewalk Worl												
SHA #2 Gravel #57 Gravel	10 499	CY CY	\$	90.00	\$	936.00 29,964.00	\$ 29,964		\$ 9	936				
1.5" HMA Surface Course	7,073	SY	\$	6.00	\$	42,438.00	\$ 29,964		\$ 42,4	138				
4" HMA BASE 25mm PG 70-22	1,430	SY	\$	26.00	\$	37,180.00			\$ 37,1					
Concrete Curb and Gutter	5,913	LF	\$	17.00	+-	100,521.00					\$ 100,521			
Concrete Sidewalk Ramp Type "A" Concrete Sidewalk Ramp Type "B"	2 22	EA EA	\$	1,500.00 2,000.00	\$	3,000.00 44,000.00					\$ 3,000 \$ 44,000			
Porous Concrete 3" deep	15,100	SF	\$	6.00	\$	90,600.00	\$ 90,600				7 44,000			
Concrete- General Use	30	CY	\$	175.00	\$	5,250.00								
3" Hadaydasia	Drainag			10.00		20.075.00	ć 20.2==							
3" Underdrain 5' Prince George's County Type E Inlet	2,375 2	LF EA	\$	4,000.00	\$	30,875.00 8,000.00	\$ 30,875					\$ 8,000		
Modify Existing Inlet	8	EA	\$	1,800.00	+-	14,400.00	\$ 11,143			-		0,000 ب	\$	3,257
15" RCP	51	LF	\$	125.00	\$	6,375.00	,					\$ 6,375		
	gning and N	T												
4" Solid White Thermoplastic Line 4" Double Solid Yellow Centerline	424 233	LF LF	\$	2.00 4.00	_	932.00			•	348 332				
6" Solid White Thermoplastic Line	2,970	LF	\$	2.00	+	5,940.00			\$ 5,9	_				
12" Solid White Thermoplastic Line	247	LF	\$	10.00	\$	2,470.00				170				
24" Solid White Thermoplastic Line	636	LF	\$	20.00	\$	12,720.00			\$ 12,7					
24" Solid Green Thermoplastic Line Green Thermoplastic Marking	310 495	LF SF	\$	25.00 10.00	\$	7,750.00 4,950.00			\$ 7,7 \$ 4,9	750 NEO				
Sign Panel	210	SF	\$	30.00	\$	6,300.00			\$ 6,3					
Sign Post (Wood 4"x4")	210	LF	\$	10.00	\$	2,100.00			\$ 2,1	_				
Thermoplastic Arrow	18	EA	\$	300.00	\$	5,400.00			\$ 5,4	_				
Thermoplastic Bike Symbol White Preformed Thermoplastic Pavement	18	EA	\$	250.00	\$	4,500.00			\$ 4,5	00				
Markings (Text)	51	SF	\$	17.00	\$	873.80			\$ 8	374				
HARDSCAPE														
CRUSHED STONE PATH	1.0	TON:		05.00	_	1 252 22		4 1 252						
COMPACTED DECOMPOSED GRANITE 4" Filter Cloth - Class A GEOTEXTILE FABRIC	16 142	TON sv	\$	\$5.00 \$14.00	\$	1,360.00 1,988.00		\$ 1,360 \$ 1,988						
3/16" x4" STEEL HEADER WITH	172	31		Ţ14.00	7	1,300.00		7 1,500						
INTERLOCKING STAKE	435	LF	\$	3.00	\$	1,305.00		\$ 1,305						
SEATING AREA CONCRETE PAVING	2	CV	ć	CF0.00	<u>,</u>	1.050.00					ć 1050			
Concrete - Reinforced, in place 4" Concrete - Reinforced, in place 6"		CY CY	\$	650.00 650.00	\$ \$	1,950.00 3,250.00					\$ 1,950 \$ 3,250		<u> </u>	
6 Inch Graded Aggregate Subbase (GASB)			Ť		7	3,230.00					φ 0,200			
Course	434		\$	8.00	+	3,472.00					\$ 3,472			
EXPANSION JOINT FILL MATERIAL	150	LB	\$	3.00	\$	450.00					\$ 450			
STONE FILTER STRIP Concrete PAVERS 2x2	40	SF	\$	23.00	\$	920.00	\$ 920							
Concrete PAVERS 2x6"		SF	\$	23.00	-	230.00								
Granite Blocks	144	SF	\$	25.00	\$	3,600.00	\$ 3,600							
2 Inch Graded Aggregate Subbase (GASB) Course	16	SY	\$	3.00	\$	48.00	\$ 48							
Bed Mulching - 2 Inch	840		\$	3.00	\$	2,520.00								
BIORETENTION Bed					Ĺ	·	,- ,-							
Bioretention Soil Mix 2'	307		\$	90.00	\$	27,630.00							\$	27,630
Coarse Sand 4" No. 7 Aggregate 4"		CY CY	\$	115.00 85.00	\$	5,865.00 4,335.00							\$	5,865 4,335
No.57 Aggregate 12"	162		\$	60.00	\$	9,720.00							\$	9,720
No.2 Aggregate 3"		CY	\$	90.00	<u> </u>	3,420.00							\$	3,420
Top Soiling - 2 Inch	1516	SY	\$	15.00	\$	22,740.00				_			\$	22,740
SCARBOROUGH BACKED HORIZ. STRAP BENCH 72"	٦	EACH	\$	1,850.00	Ś	5,550.00					\$ 5,550			
SCARBOROUGH TRASH RECEPTACLE		EACH	\$	1,370.00		1,370.00					\$ 1,370			
KALEIDOSCOPE OS SHELTER 2 POSTS, ONE														
BAY Concrete - Reinforced, in place. Footer	0.3	EACH	\$	13,460.00 650.00	_	13,460.00 195.00				_	\$ 13,460		\$	195
Concrete - Reimorcea, in place. Footer	0.3	CT	Ş	650.00	Ş	195.00							Ş	195
RETAINING WALL														
Hot Dipped Galanized Rebar (60d Spikes)	121	LF	\$	25.00	\$	3,025.00					_	\$ 3,025		
4"Inch High Density Polyethylene (HDPE)	350		ے	44.00	۲	2 750 00						6 2750		ļ
Underdrain Slotted/Solid 6X6 Preasure Treated Timber	250 1295		\$	11.00 3.00	1	2,750.00 3,885.00						\$ 2,750 \$ 3,885		
No.57 Aggreagate		CY	\$	60.00	<u> </u>	4,020.00						\$ 4,020	_	
Landscaping Summarswoot 3 Gal. Cont	21	EACH	¢	CE 00	۲	1 265 00							۲.	1 205
Summersweet 3 Gal. Cont Inkberry Holly 3 Gal. Cont		EACH EACH	\$	65.00 65.00	_	1,365.00 3,380.00							\$	1,365 3,380
serry riony s dan cont	J 2	_, .011	٧	03.00	۲	3,300.00	<u> </u>	1				<u> </u>	۲	5,500

			Total Estimated Cost	\$1,887,700	\$200,000	\$350,000	\$300,000	\$400,000	\$250,000	। ५३४	37,636
10% Co	ntingency	<u> </u>		\$163,150				\$129,977		\$33,1	
1011				Ć163 1F0				¢120.077		¢22.4	72.00
County Permits				\$93,000				\$93,000			
			Subtotal	. , ,		\$0	\$100,923	\$0	\$7,207	\$13	80,471
Inspection (10%)	1	LS	\$85,215.00				\$64,800		\$723		.9,692
Maintenance of Highway Traffic (5%)	1	LS	\$42,607.00				\$36,123		\$6,484	1	0.00
Utility Adjustments (8%)	1	LS	\$68,172.00							\$6	8,172
E&S (5%)	1	LS	\$42,607.00								2,607
	Lump Sum	Items									
			Subtotal	\$1,392,886	\$200,000	\$350,000	\$199,077	\$177,023	\$242,794	\$22	3,992
Remove Existing Lights	24	EACH	\$ 500.00	\$ 12,000.00					\$ 12,000		
Furnish and Install Electracla Manhole	3	EACH	\$ 2,500.00						\$ 7,500		
WeatherHead	1	EACH	\$ 550.00	•					\$ 550		
Electrical Riser-Galvanized Riser, 3"	50	LF	\$ 21.00	\$ 1,050.00					\$ 1,050		
Connector Kit Type 3	38	EACH	\$ 100.00						\$ 3,800		
Connector Kit Type 2	4	EACH	\$ 115.00	\$ 460.00					\$ 460		
Ground Rods & Connector	45	EACH	\$ 300.00	\$ 13,500.00					\$ 13,500		
#10 AWG THHN	1636	LF	\$ 1.20	\$ 1,963.20					\$ 1,963		
#6 AWG THHN	12537	LF	\$ 2.50	· ·					\$ 31,343		
2" PVC-Sch80, Trenched	1072	LF	\$ 25.00						\$ 26,804		
Service Wire #250	300	LF	\$ 5.00						\$ 1,500		
Tamped Fill	212	CY	\$ 25.00	. ,					\$ 5,304		
Select Fill	212	CY	\$ 60.00						\$ 12,731		
Trenching		CY		\$ 12,730.67					\$ 12,731		
Utility Backcharge (PEPCO-Budget Cost)	1	LS	\$ 25,000.00						\$ 25,000		
Electrical Utility Service 120/240V up to 200A	1	LS	\$ 4,000.00						\$ 4,000		
Metered Service Pedestal	1	EACH	\$ 7,500.00						\$ 7,500		
Lighting Control Cabinet	1	LS		\$ 22,000.00		7,54/			\$ 15,000		
Park/Post	35 4	EACH		\$ 262,500.00		\$ 262,500 \$ 9,347			\$ 12,653		
Tear Drop with Concrete Foundation Post/Arm	7 35	EACH		\$ 73,500.00 \$ 262,500.00		\$ 73,500					
Took Drop with Congrete Foundation	Lightin	g EACH	ć 10 F00 00	¢ 73.500.00		¢ 72.500					
Seeding	1300		\$ 3.00	\$ 3,900.00						\$ 3	3,900
Bed Preparation		ACRE	\$ 1,500.00	·						\$	255
Flowering Dogwood 1.5" Cal. B&B	2	EACH	\$ 250.00	•						\$	500
Forest Pansy Redbud 1.5" Cal. B&B	3	EACH	\$ 250.00							\$	750
Serviceberry 1.5" Cal. B&B	9	EACH	\$ 250.00	,							2,250
Cal. B&B	3	EACH	\$ 450.00								1,350
Thornless Honeylocust 'Shademaster' 3"-4"											
Pin Oak 3"-4" Cal. B&B	3	EACH	\$ 450.00	\$ 1,350.00						\$ 1	1,350
River Birch 3"-4" Cal. B&B3"-4" Cal. B&B	3	EACH	\$ 450.00	. ,							1,350
Sweetbay Magnolia 3"-4" Cal. B&B	1	EACH	\$ 450.00							\$	450
St. John's Wort 3 Gal. Cont	80	EACH	\$ 65.00	\$ 5,200.00							5,200
Autumn Joy Sedum 1 Gal. Cont	131	EACH	\$ 30.00	\$ 3,930.00							3,930
Walker's Low Catmint 1 Gal. Cont	128	EACH	\$ 30.00	\$ 3,840.00						\$ 3	3,840
Deutschland Astilbe 2 Gal. Cont	29	EACH	\$ 40.00	\$ 1,160.00						\$ 1	1,160
Blue Flag Iris 1 Gal. Cont	73	EACH	\$ 30.00	,							2,190
Royal Fern 1 Gal. Cont	35	EACH	\$ 30.00	\$ 1,050.00							1,050
Big Blue Lilyturf 1 Quart. Cont	622	EACH	\$ 30.00								3,660
Blue-Rug Juniper 5 Gal. Cont	42	EACH	\$ 75.00	\$ 3,150.00							3,150
Pennsylvania Sedge 1 Gal. Cont	105	EACH	\$ 30.00	\$ 3,150.00							3,150
Late Blooming Fountain Grass 1 Gal. Cont	427	EACH	\$ 30.00	\$ 12,810.00							2,810
Switch Grass 'Cheyenne Sky' 1 Gal. Cont	66	EACH	\$ 30.00								1,980
Soft Rush 1 Gal. Cont	59	EACH	\$ 30.00	. ,							1,770
Gro-Low Fragrant Sumac 5 Gal. Cont	40	EACH	\$ 75.00	\$ 3,000.00							3,000
Smooth Hydrangea 3 Gal. Cont	18	EACH	\$ 65.00	•							1,170
Nana Red Sprite Winterberry 5 Gal. Cont Winterbery 'Jim Dandy' 5 Gal. Cont	32 5	EACH	\$ 75.00 \$ 75.00	\$ 2,400.00						\$ 2	2,400 375
Nana Bod Chrita Winterharm: F Cal Cant	วา	EACH EACH	\$ 75.00 \$ 75.00	\$ 1,725.00 \$ 2,400.00							1,725

This opinion of probable construction cost was developed by identifying pay items and establishing quantities based on the 60% construction documents. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Cost opinions include a 15% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2019 dollars and were assigned based on historical cost data from Maryland Department of Transportation, Prince George's County, and the past experiences of the design engineer. This cost opinion does not include easements or right-of-way acquisition; permitting, or construction management; escalation; or the cost for ongoing maintenance. This cost opinion is provided for the Client's information for grant funding purposes, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client. Items and quantities may change prior to bidding and construction; as such, flexibility may be required when identifying which funding sources may be used to cover specific construction items.